

## CLAIMS

1. A method of manufacturing optical fiber base material employing the OVD process, in which a burner is relatively reciprocated against and along an initial material to deposit glass fine particles on said initial material to produce an optical fiber base material, comprising steps of: relatively reciprocating said burner and said initial material; and stopping said relative reciprocation in a predetermined period at returning positions thereof.

2. The method of manufacturing the optical fiber base material according to claim 1, wherein the stopping period is no less than 3 seconds and no more than 60 seconds.

3. The method of manufacturing the optical fiber base material according to claim 1 or 2, wherein in the stopping period during the relative reciprocation, combustion gas is decreased.

4. The method of manufacturing the optical fiber base material according to one out of claims 1 to 3 wherein in the stopping period during the relative reciprocation, the amount of material gas is increased.

5. The method of manufacturing the optical fiber base material according to one out of claims 1 to 4, wherein one of the deposition period, the deposition weight, or the number of relative reciprocation is primarily set as a condition, and the stopping period during the relative reciprocation is changed continuously depending on said determined condition.

6. The method of manufacturing the optical fiber base material according to one out of claims 1 to 5, wherein one of the deposition period, the deposition weight, or the number of relative reciprocation is primarily set as a condition, and the stopping period during the relative reciprocation is changed step-by-step depending on said determined condition.

7. The method of manufacturing the optical fiber base material according to one out of claims 5 or 6, wherein if the diameter of said optical fiber base material increases, said certain period in which said burner stops is extended.

8. The method of manufacturing the optical fiber base material according to one out of claim 7, wherein if said deposition period increases, said certain period, in which said burner stops, is extended.

9. The method of manufacturing the optical fiber base material according to one out of claim 7, wherein if said deposition weight increases, said certain period, in which said burner stops, is extended.

10. The method of manufacturing the optical fiber base material according to one out of claim 7, wherein if the number of relative reciprocation increases, said certain period, in which said burner stops, is extended.

11. Optical fiber base material which is made in one of the methods of manufacturing optical fiber base material according to one out of claims 1 to 10.